

Use and Care of Personal Protective Equipment (PPE)

LG #12



A. Background

Information

- **In use for thousands of years**
 - Animal bladders used as respiratory protection
- **PPE does not eliminate hazards**
- **PPE establishes “last line of defense” against workplace hazards**
- **PPE may be only option for protection**
 - Used when hazards not controlled by any other means

Design and Certification

- **Designed according to American National Standards Institute (ANSI) standards**
 - **Hard hats, safety glasses, steel-toed safety shoes**
- **Respiratory Protection tested & certified by NIOSH and MSHA**
- **Hearing protection assigned Noise Reduction Ratings (NRR) by EPA**



B. Responsibilities

Commanding Officer

- Shall ensure sufficient PPE aboard to meet needs of the command
- Shall ensure adequate funding provided to obtain or replace missing or worn-out PPE

Safety Officer

- **Ensures use of PPE monitored for required work or in required spaces**
- **Ensures PPE worn in proper and effective manner**
- **May use checklist in Appendix B12-A to monitor compliance**

Division Officers

- **Stock PPE and provide to personnel as needed**
- **Shall ensure proper PPE maintenance**
- **Shall ensure assigned personnel properly trained on type and use of PPE**
- **Shall enforce proper use and wear of PPE**

All Hands

- **Ensure required PPE is worn to perform assigned work in proper manner**
- **Ensure instruction is received on wear and use**
- **Notify the supervisor if equipment not available, or instruction not received**



C. PPE Selection

Selection of PPE

PPE must be selected based on the specific Hazard evaluation includes the following:

- **What type of material is being handled?**
- **Is there adequate ventilation?**
- **Does the MSDS require PPE?**
- **How long does the worker use the material?**

Hazard Evaluation (continued)

- **Will the material cause severe injury upon eye contact?**
- **Does the work generate chips or dust?**
- **Does the PMS MRC require PPE?**

Where to Find PPE Information

- **OPNAVINST 5100.19 (series)**
- **MSDS/HMIS**
- **HMUG**
- **MRC**
- **Technical manuals**
- **Standard Operating Procedures (SOP)**



D. Types of Protective Equipment

Head Protection

Protects crew members from impact of falling and objects, from impact with low overheads, and from shock and burns (limited basis)

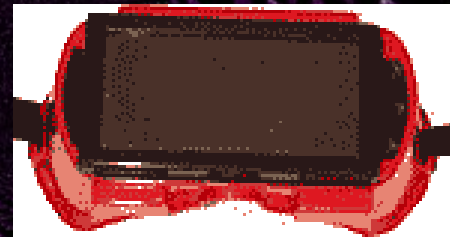
- **Helmets**
- **Cranials**
- **Hard hats**



Eye Protection

Protects personnel from exposure to flying particles, objects, molten metal, liquid chemicals, acids or liquids, chemical gases or vapors, or potentially ionizing light radiation

- **Goggles**
 - Chemical splash
 - Impact
- **Safety glasses**
- **Welding/brazing goggles & helmets**



Hearing Protection

Used to protect personnel from the Fleet's numerous occupational health hazard, and to control exposure to high intensity noise sources such as gun & missile launchers, aircraft noise, and ship's propulsion systems.

- **Ear plugs**
 - Fitted
 - Disposable
- **Ear muffs**



Respiratory Protection

Used to prevent and control occupational disease by breathing air contaminated with harmful dusts, fumes, mists, gases, smokes, sprays, or vapors. Also used in oxygen-deficient atmospheres

- **Air-purifying respirators**
- **Air-supplying respirators**



Full Body Protection

Items may be specified as required by zone inspection, industrial health surveys, or SOP's. Clothing is designed to protect the worker during operations such as fire fighting, welding, responding to spills of HM, or ripping out

- **Flameproof coveralls**
- **Disposable coveralls**
- **Impervious chemical spill coveralls**
- **Welding leathers**
- **Chemical aprons**



Hand Protection

Used to protect employees' hands from hazards such as absorption from harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical and thermal hazards; harmful temperature extremes

- **Rubber electrical safety gloves**
- **Chemical protective gloves**
- **Leather gloves**
- **Hot work (insulated) gloves**



Fall Protection

Equipment used when climbing, working aloft or over the side

- **Safety harnesses**
- **Dyna-Brake lanyards**
- **Wire rope (for hot work)**
- **D-rings**
- **Safety lines**



Foot Protection

To protect affected personnel when working in areas where there is a danger of foot injuries due to falling or objects piercing the sole, and where feet are exposed to electrical hazards

- Semi-conductive safety shoes
- Safety shoes with electrical hazard soles
- Chemical protective shoes or boots
- Molded boots with toe protection
- Steel toe safety shoes



Personal Flotation Devices

Used to protect personnel in open sea operations working over the side, working topside in heavy weather, during replenishment at sea, in small boat operations, and at exposed battle stations

- **Kapok life preserver**
- **Inflatable life preserver**





E. Care and Maintenance of PPE

Care & Feeding

- **Take care of your PPE and it will take care of you!**
- **Before each use inspect for:**
 - **Visible wear**
 - **Missing parts**
 - **Dirt**
 - **Physical damage**
 - **Is there PMS coverage for the item?**

More Guidance

- **Report damaged equipment**
- **Replace PPE as necessary**
- **NEVER “jury-rig” PPE**
- **Clean & disinfect before passing to another user**
- **Store in a clean, dry location**
- **Ensure supervisor has performed training**